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United States Patent [19]

Haneda et al.

[11] **Patent Number:** 5,698,822[45] **Date of Patent:** Dec. 16, 1997[54] **INPUT AND DISPLAY APPARATUS FOR
HANDWRITTEN CHARACTERS**

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[30] **Foreign Application Priority Data**

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[58] **Field of Search** 178/18, 19; 345/143,
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[57] **ABSTRACT**

An input/display apparatus for handwritten characters is capable of quickly inputting handwritten characters, freely editing characters inputted, and storing a lot of handwritten characters with a limited storing capacity. On a display panel provided with a display surface, the orthogonal coordinates of which are preset, a touch panel provided. An input surface of the touch panel, the orthogonal coordinates of which are preset, is disposed in such a way that the display surface and the input surface overlap each other. When the input surface is indicated with an input pen, the indicated coordinate point is outputted. At the time of handwriting input, when the input surface in the input/display area for characters is continuously indicated, coordinate points on the display surface corresponding to the plurality of indicated coordinate points are displayed. After the handwriting input is over, stroke data consisting of coordinate points extracted on the basis of predetermined references from among a plurality of coordinate points outputted from the touch panel at the time of handwriting input are prepared. The stroke data are displayed by being converted to a size corresponding to the width of the line set in the area after the display position of the cursor.

14 Claims, 48 Drawing Sheets